



# 中华人民共和国科学技术部

Ministry of Science and Technology of the People's Republic of China

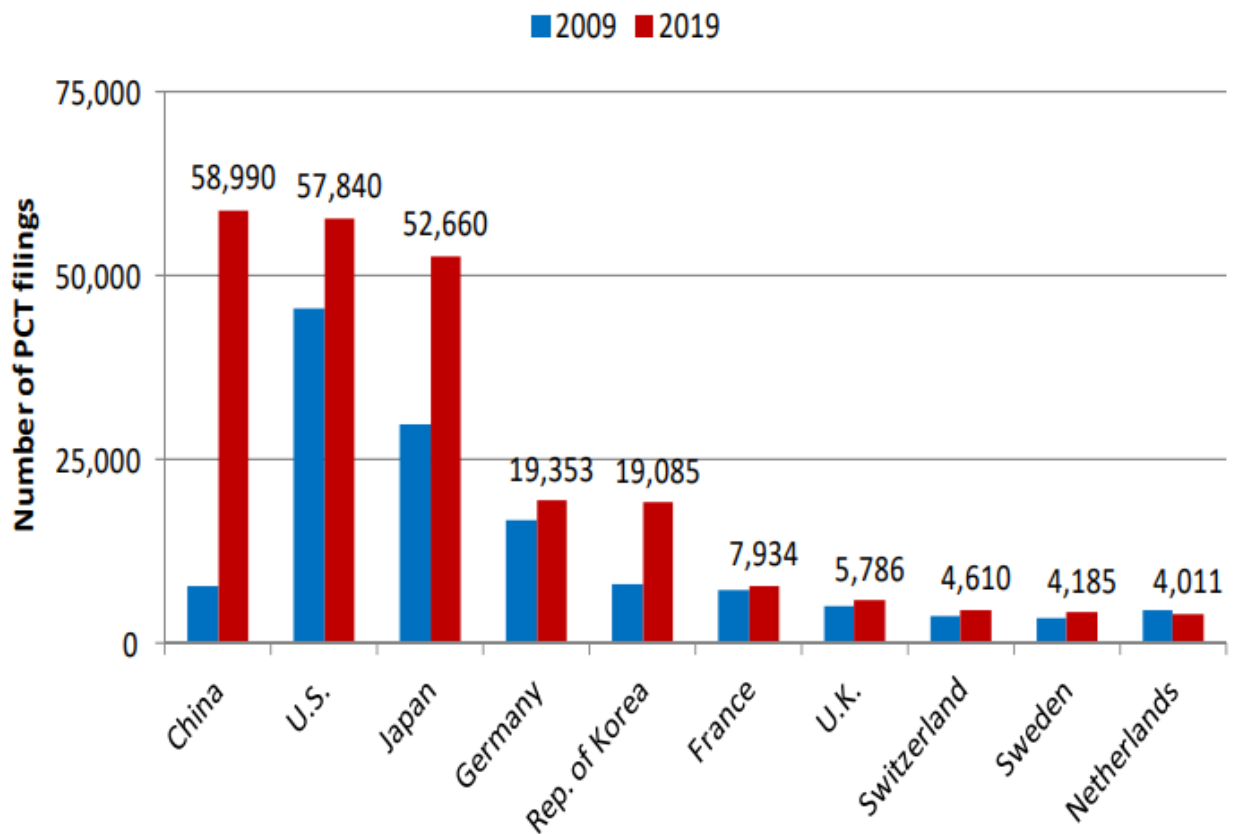


## CHINA S&T NEWSLETTER

No.3 2020

### Content

Focus: Patent data in China 2019



Source: WIPO

## China becomes top source of international patent applications for the first time

On April 7, WIPO released the data on international patents, trademarks and industrial designs filed in 2019 at a briefing held in Geneva, Switzerland.

With 58,990 applications filed in 2019 via WIPO's *Patent Cooperation Treaty* (PCT) System, China surpassed the U.S., which filed 57,840 applications the same year, as the biggest source of international patent applications. In 2019, global IP applications hit a record high. A total of 265,800 international patent applications were filed last year, a hike of 5.2% from 2018. International trademark applications filed through Madrid system reached 64,400, increasing 5.7% over 2018. Industrial design applications filed through Hague system were 21,807, growing 10.4% over the previous year. The top five filers of PCT applications were China (58,990), the United States (57,840), Japan (52,660), Germany (19,353) and South Korea (19,085). The top five filers of international trademark applications using the Madrid system were the United States (10,087), Germany (7,700), China (6,339), France (4,437) and Switzerland (3,729). The top five filers of designs under the Hague system were Germany (4,487), South Korea (2,736), Switzerland (2,178), Italy (1,994) and the Netherlands (1,376).

Chinese companies and universities performed well in PCT filings. In 2019, China's Huawei Technologies filed 4,411 PCT applications, ranking No.1, followed by Japan's Mitsubishi (2,661), South Korea's Samsung (2,334), the United States' Qualcomm (2,127), and China's Oppo (1,927). Among the top ten corporate filers, there were 4 Chinese companies. The University of California, which filed 470 international patent applications, continued to be No. 1 among all universities, followed by Tsinghua University (265), Shenzhen University (247), MIT (230) and South China University of Technology (164). Among the top ten universities, five were from the United States, four from China and one from South Korea.

China has pursued an innovation-driven development strategy and IP strategy, stepping up investment in innovation and R&D and enhancing IP protection, in an effort to create a business-friendly environment. This results in increased number and quality of IP in China and improved international influence as well.

## 2019 China Patent Survey Report released

State Intellectual Property Office published *2019 China Patent Survey Report* recently. The survey, covering 25 provinces, autonomous regions and municipalities, involved four types of patentees, namely, enterprises, universities, research institutes and individuals with valid patents as of the end of 2018, and three types of patents, namely inventions, utility models and designs.

### Enterprises file more patents to protect their interests overseas

In 2019, 3.5% of overseas patent applications (including PCT) filed by China were enterprises, an increase of 1.4% over 2018. Enterprises with overseas R&D operations are much more willing to file overseas patent applications than those without R&D operations abroad. The top filers of overseas patent applications were enterprises with wholly-owned overseas R&D centers, accounting for 41.2%.

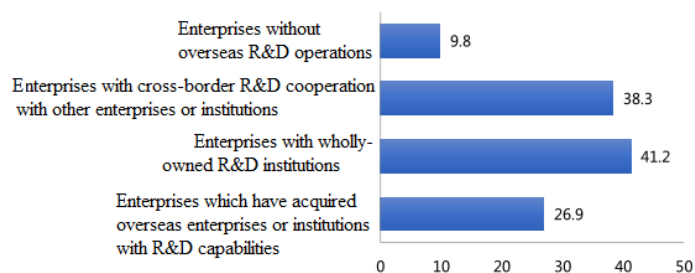


Figure 1 Overseas patent applications of enterprises with or without overseas R&D operations (unit: %)

In addition, for different purposes of overseas R&D, enterprises were significantly divergent in their willingness to apply patents overseas (including PCT).

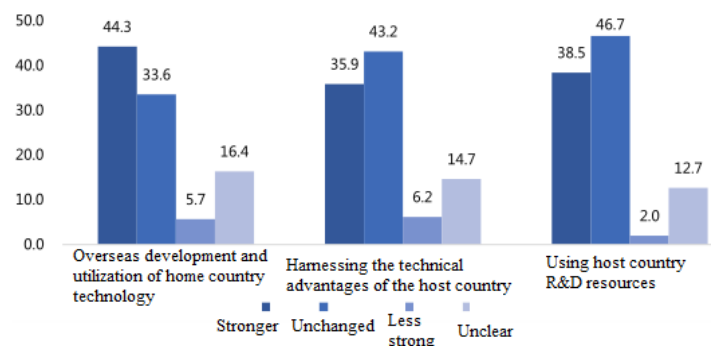


Figure 2 Comparison of willingness of enterprises with different purposes of overseas R&D to file patent applications overseas

## Patent operation is stable

The year 2019 witnessed good patent enforcement as a whole, and sound patent portfolio. Universities and research institutes still had much room for improvement in terms of patent enforcement.

Steady improvement in patent enforcement. In 2019, 55.4% of valid patents were enforced, 38.6% commercialized, 6.1% licensed and 3.5% transferred, growing 2.8%, 2.3%, 0.6% and 0.4% respectively over 2018. That showed a general improvement in patent enforcement in China.

Significant benefits brought by patent enforcement. Most of the patentees expected their patent earnings to be less than 500,000 yuan, 25.5% of which were somewhere between 100,000 and 500,000 yuan. Among the enforced patents with proceeds of over 500,000 yuan, the overall earnings were 11.9% higher than the patentees' expectation.

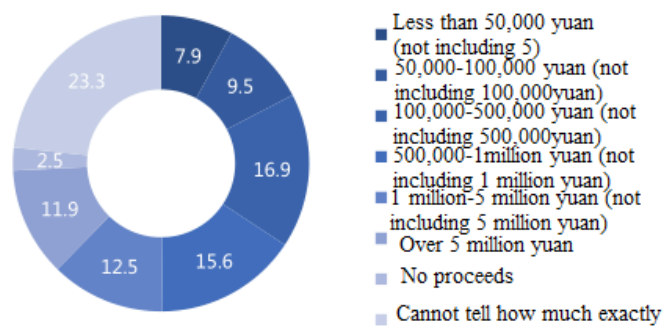


Figure 3 Distribution of proceeds from enforced patents (unit: %)

## Core patent technologies are hard to bring in

Chinese companies bring in more patents than export them. China's international patent technology transactions are mainly conducted with a certain region, and strategic emerging industries find it very hard to bring in patents.

Only 0.7% of Chinese companies have transferred or licensed patents to foreign entities or individuals, while a higher 1.5% have used patents of foreign entities or individuals. More patents have been brought in than being exported.

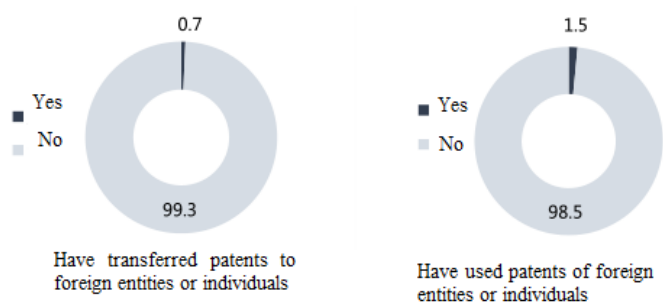


Figure 4 Chinese companies' patent transfer to foreign countries or use of foreign patents

## Patent transfer to foreign entities or individuals

Chinese companies international patent transactions are mainly conducted with Europe, the United State and Japan. Europe accounts for 40.5% of the total patents transferred by Chinese companies, followed by the United States (28.8%) and Japan (22.8%). Europe takes up 43.7% of the patents used by Chinese companies, followed by the United States (40%) and Japan (25.2%).

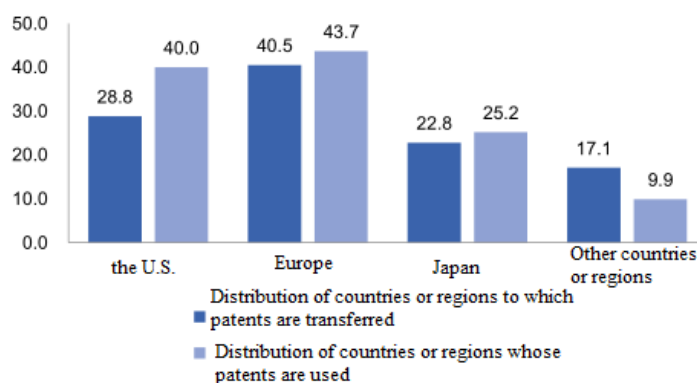


Figure 5 Geographic distribution of Chinese companies' international patent transactions (unit: %)

## Patent bringing-in

12.5% of enterprises engaged in strategic emerging industries find it very hard to bring in patents, mainly in the field of materials (40.3%) and computer, communications and electronics (37.5%). This is higher than that of enterprises in non-strategic emerging ones.

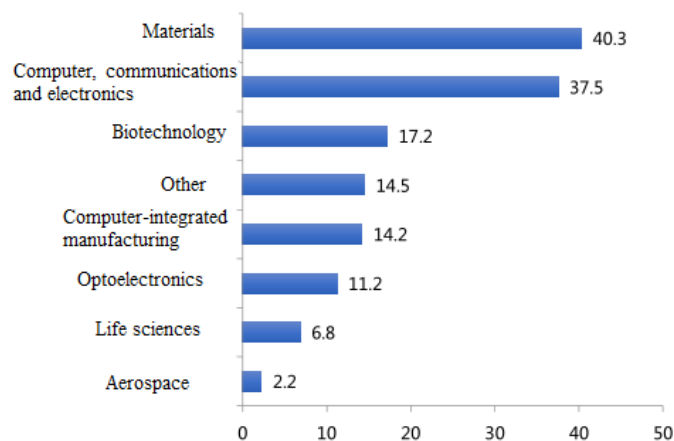


Figure 6 The fields in which patents are hard to bring in (unit: %)

## **Companies adopt increasingly sound IP management practices**

34.7% of companies have in-house IP management institutions, an increase of 3.6% over 2018. Enterprises with 2 full-time IP managers or less, and those with 2 part-time IP managers or less account for 73.5% and 79.4% of the total respectively. 50.4% of enterprises put in place IP asset management system, a growth of 0.7% over the previous year.

(Source: State Intellectual Property Office)